

CIRM welcomes new board Chair, invests \$26 million in research

Posted: March 27, 2023

South San Francisco, CA —Dr. Vito Imbasciani was sworn in as the new Chair of the Board of the California Institute for Regenerative Medicine (CIRM).

Imbasciani was elected to the six-year term at CIRM's January Board meeting. He will replace outgoing chair Jonathan Thomas, who has served in the position since 2011.

"Dr. Imbasciani's experience across many relevant fronts will help him hit the ground running in guiding the Agency as it continues to grow its programs to bring treatments to patients with unmet medical needs," Thomas said in welcoming Imbasciani to the role. "The agency, as well as the people of California and the world, will be well served by Imbasciani's appointment as Chair of the CIRM Governing Board."

Imbasciani has served as the Secretary of the California Department of Veterans Affairs (CalVet) since 2015. As Secretary, he created several new programs within the department, including forging eight independent California veteran homes into a unified system, establishing programs for veterans in state prisons, and supporting the 58 county veteran service offices.

"My experience has positioned me to champion the aims of CIRM, advocate for it cogently, and represent it responsibly before the public and their state and federal elected representatives," Imbasciani said. "I look forward to the challenge of advancing the groundbreaking work of this Agency, at the same time nourishing the hopes for medical advances held by the citizens of our great State."

CIRM Invests \$26 Million in Research

While stem cell and gene therapy research has advanced significantly over the years, there are still many questions about their potential and how best to use these approaches in developing safe and effective therapies.

That's why the governing Board of the California Institute for Regenerative Medicine (CIRM) approved investing nearly \$26 million in 17 projects in early-stage discovery research at its March meeting.

The awards are from CIRM's DISC-o: Foundation Awards Program, which supports rigorous studies addressing critical basic knowledge gaps in the biology of stem cells and regenerative medicine approaches and to advance stem cell-based tools.

Included in the awards is a \$1,352,753 grant to Dr. Gay Crooks of the University of California, Los Angeles to develop new gene editing methods for producing universal, off-the-shelf, therapeutic T cells from induced pluripotent stem cells (iPSC) that can be applied to a range of diseases.

T cells are a type of white blood cell that protects the body from infection and may help fight cancer.

Approximately 60,000 Californians die of cancer each year. While successes have been reported using T cell therapy to cure blood cancers, many patients are unable to access this novel therapy, and there are additional challenges to their use for treating solid tumors such as brain cancer.

Crooks' goal is to produce an off-the-shelf universal T cell product to dramatically expand the reach of this promising therapy. If successful, the project would produce a platform that may be applicable to multiple CAR therapies and would allow the research community to advance iPSC-based T cell therapies.

"This project has great potential to have a major impact on CAR-T therapy and addresses a significant bottleneck in the field, which aligns with CIRM's strategic initiatives to deliver real world solutions for the research community and patients," says CIRM President and CEO Dr. Maria Millan.

The successful applicants in CIRM's DISC-o program are:

Application	Program Title	Principal Investigator / Institution	Amount
DISCo-14350	The role of WNT and BMP signaling pathways in iPSC to iTenocyte step-wise differentiation for tendon repair	Sheyn, Dmitriy - Cedars-Sinai Medical Center	\$1,516,563
DISCo-14357	Understanding Chemotherapy-Induced Peripheral Neuropathy Mechanisms using CRISPRi and Chemical Screens in Human iPSC-Derived Sensory Neurons	Kroetz, Deanna - University of California, San Francisco	\$1,621,913
DISCo-14366	Determining how age-specific heterogeneity of human hematopoietic stem cells and megakaryocyte progenitors contribute to thrombotic disease upon aging	Forsberg, Camilla - University of California, Santa Cruz	\$1,536,000
DISCo-14392	Harnessing vascular stem cells to grow and protect the human brain	Crouch, Elizabeth - University of California, San Francisco	\$1,625,998
DISCo-14405	Establishment of a novel approach to systematically study the dynamic organization of protein complexes in stem cells	Goren, Alon - University of California, San Diego	\$1,515,601
DISCo-14422	Engineering pluripotent stem cells for universally available, off-the-shelf T cell therapies	Crooks, Gay - University of California, Los Angeles	\$1,352,753
DISCo-14424	Functional genomics to study cellular convergence across ASD risk genes in neurodevelopment	Jin, Xin - Scripps Research Institute	\$1,575,001
DISCo-14429	Identifying roadblocks to neural stem cell transplantation into human tissues.	Nowakowski, Tomasz - University of California, San Francisco	\$1,551,394
DISCo-14447	Mapping the spatial and temporal responses of hESC-derived microglia to repeat mild closed head injury to identify therapeutic targets and mechanisms	Cummings, Brian - University of California, Irvine	\$1,555,140
DISCo-14448	Role of ataxin-3 polyadenylation site selection in ALS neuron toxicity and disease pathogenesis	La Spada, Albert - University of California, Irvine	\$1,514,416
DISCo-14449	Modeling Retinitis Pigmentosa using patient-derived human iPSC organoids	Lamba, Deepak - University of California, San Francisco	\$1,612,617

DISCo-14458	Overcoming barriers for airway stem cell gene therapy for Cystic Fibrosis	Gomperts, Brigitte - University of California, Los Angeles	\$1,472,858
DISCo-14460	Ex vivo fate mapping of human lung stem cell plasticity in fibrotic disease	PENG, TIEN - University of California, San Francisco	\$1,625,998
DISCo-14503	Characterization and applications of human blastoids for understanding early human embryogenesis	Plath, Kathrin - University of California, Los Angeles	\$1,402,137
DISCo-14519	Defining the source of dysfunction in monogenic Intellectual Disability Syndrome neurons	Lowry, William - University of California, Los Angeles	\$1,500,337
DISCo-14521	hPSC-derived enteric ganglioids for cell therapy in gastrointestinal motility disorders	Fattahi, Faranak - University of California, San Francisco	\$1,589,307
DISCo-14514	An interactive data resource for hypothesis testing in stem cell single-cell gene expression and validation of the results with brain organoids	Haeussler, Maximilian — University of California, Santa Cruz	\$1,160,126

In addition, Dr. Vito Imbasciani was sworn in as CIRM's new Chair of the Board. Imbasciani was elected to the six-year term at CIRM's January Board meeting. He will replace outgoing chair Jonathan Thomas, who has served in the position since 2011.

"Dr. Imbasciani's experience across many relevant fronts will help him hit the ground running in guiding the Agency as it continues to grow its programs to bring treatments to patients with unmet medical needs," Thomas said in welcoming Imbasciani to the role. "The agency, as well as the people of California and the world, will be well served by Imbasciani's appointment as Chair of the CIRM Governing Board."

Imbasciani has served as the Secretary of the California Department of Veterans Affairs (CalVet) since 2015. As Secretary, he created several new programs within the department, including forging eight independent California veteran homes into a unified system, establishing programs for veterans in state prisons, and supporting the 58 county veteran service offices.

"My experience has positioned me to champion the aims of CIRM, advocate for it cogently, and represent it responsibly before the public and their state and federal elected representatives," Imbasciani said. "I look forward to the challenge of advancing the groundbreaking work of this Agency, at the same time nourishing the hopes for medical advances held by the citizens of our great State."

About the California Institute for Regenerative Medicine (CIRM)

At CIRM, we never forget that we were created by the people of California to accelerate stem cell treatments to patients with unmet medical needs, and act with a sense of urgency to succeed in that mission.

To meet this challenge, our team of highly trained and experienced professionals actively partners with both academia and industry in a hands-on, entrepreneurial environment to fast track the development of today's most promising stem cell technologies.

With \$5.5 billion in funding and more than 150 active stem cell programs in our portfolio, CIRM is one of the world's largest institutions dedicated to helping people by bringing the future of cellular medicine closer to reality.

For more information go to www.cirm.ca.gov